BioMap and Living Waters

Guiding Land Conservation for Biodiversity in Massachusetts

Core Habitats of New Marlborough

This report and associated map provide information about important sites for biodiversity conservation in your area.

This information is intended for conservation planning, and is not intended for use in state regulations.

Produced by:

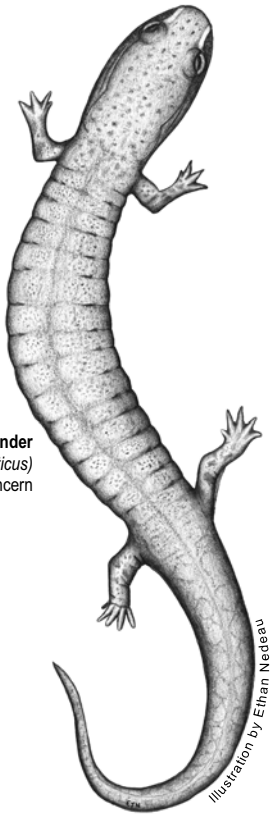
Natural Heritage & Endangered Species Program
Massachusetts Division of Fisheries and Wildlife
Executive Office of Environmental Affairs
Commonwealth of Massachusetts

Produced in 2004

BioMap and Living Waters:
Guiding Land Conservation for Biodiversity in Massachusetts

Table of Contents

* Depending on the location of Core Habitats, your city or town may not have all of these sections.



Spring Salamander
(Gyrinophilus porphyriticus)
Species of Special Concern

Funding for this project was made available by the Executive Office of Environmental Affairs, contributions to the Natural Heritage & Endangered Species Fund, and through the State Wildlife Grants Program of the US Fish & Wildlife Service.

Natural Heritage & Endangered Species Program

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For more information on rare species and natural communities, please see our fact sheets online at ***www.nhesp.org***

BioMap and Living Waters:
Guiding Land Conservation for Biodiversity in Massachusetts

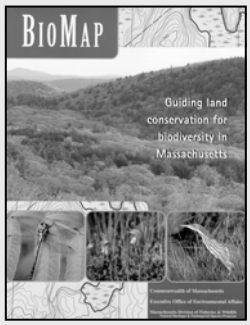
Introduction

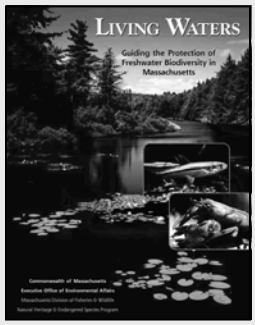
In this report, the Natural Heritage & Endangered Species Program provides you with site-specific biodiversity information for your area. Protecting our biodiversity today will help ensure the full variety of species and natural communities that comprise our native flora and fauna will persist for generatons to come.

The information in this report is the result of two statewide biodiversity conservation planning projects, ***BioMap*** and ***Living Waters***. The goal of the BioMap project, completed in 2001, was to identify and delineate the most important areas for the long-term viability of terrestrial, wetland, and estuarine elements of biodiversity in Massachusetts. The goal of the Living Waters project, completed in 2003, was to identify and delineate the rivers, streams, lakes, and ponds that are important for freshwater biodiversity in the Commonwealth. These two conservation plans are based on documented observations of rare species, natural communities, and exemplary habitats.

What is a Core Habitat?

Both BioMap and Living Waters delineate ***Core Habitats*** that identify the most critical sites for biodiversity conservation across the state. Core Habitats represent habitat for the state's most viable rare plant and animal populations and include exemplary natural communities and aquatic habitats. Core Habitats represent a wide diversity of rare species and natural communities (see Table 1), and these areas are also thought to contain virtually all of the other described species in Massachusetts. Statewide, BioMap Core Habitats encompass 1,380,000 acres of uplands and wetlands, and Living Waters identifies 429 Core Habitats in rivers, streams, lakes, and ponds.





Get your copy of the ***BioMap*** and ***Living Waters*** reports! Contact Natural Heritage at 508-792-7270, Ext. 200 or email natural.heritage@state.ma.us. Posters and detailed technical reports are also available.

Core Habitats and Land Conservation

One of the most effective ways to protect biodiversity for future generations is to protect Core Habitats from adverse human impacts through land conservation. For Living Waters Core Habitats, protection efforts should focus on the ***riparian areas***, the areas of land adjacent to water bodies. A naturally vegetated buffer that extends 330 feet (100 meters) from the water's edge helps to maintain cooler water temperature and to maintain the nutrients, energy, and natural flow of water needed by freshwater species.

In Support of Core Habitats

To further ensure the protection of Core Habitats and Massachusetts' biodiversity in the long-term, the BioMap and Living Waters projects identify two additional areas that help support Core Habitats.

In BioMap, areas shown as ***Supporting Natural Landscape*** provide buffers around the Core Habitats, connectivity between Core Habitats, sufficient space for ecosystems to function, and contiguous undeveloped habitat for common species. Supporting Natural Landscape was

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generated using a Geographic Information Systems (GIS) model, and its exact boundaries are less important than the general areas that it identifies. Supporting Natural Landscape represents potential land protection priorities once Core Habitat protection has been addressed.

In Living Waters, ***Critical Supporting Watersheds*** highlight the immediate portion of the watershed that sustains, or possibly degrades, each freshwater Core Habitat. These areas were also identified using a GIS model. Critical Supporting Watersheds represent developed and undeveloped lands, and can be quite large. Critical Supporting Watersheds can be helpful in land-use planning, and while they are not shown on these maps, they can be viewed in the Living Waters report or downloaded from www.mass.gov/mgis.

Understanding Core Habitat Species, Community, and Habitat Lists

What's in the List?

Included in this report is a list of the species, natural communities, and/or aquatic habitats for each Core Habitat in your city or town. The lists are organized by Core Habitat number.

For the larger Core Habitats that span more than one town, the species and community lists refer to the entire Core Habitat, not just the portion that falls within your city or town. For a list of all the state-listed rare species within your city or town's boundary, whether or not they are in Core Habitat, please see the town rare species lists available at www.nhesp.org.

The list of species and communities within a Core Habitat contains only the species and natural communities that were explicitly included in a given BioMap or Living Waters Core Habitat. Other rare species or examples of other natural communities may fall within the Core Habitat, but for various reasons are not included in the list. For instance, there are a few rare species that are omitted from the list or summary because of their particular sensitivity to the threat of collection. Likewise, the content of many very small Core Habitats are not described in this report or list, often because they contain a single location of a rare plant

Table 1. The number of rare species and types of natural communities explicitly included in the BioMap and Living Waters conservation plans, relative to the total number of native species statewide.

BioMap

	Species and Verified Natural Community Types	
Biodiversity Group	**Included in BioMap**	**Total Statewide**
Vascular Plants	246	1,538
Birds	21	221 breeding species
Reptiles	11	25
Amphibians	6	21
Mammals	4	85
Moths and Butterflies	52	An estimated 2,500 to 3,000
Damselflies and Dragonflies	25	An estimated 165
Beetles	10	An estimated 2,500 to 4,000
Natural Communities	92	> 105 community types

Living Waters

	Species	
Biodiversity Group	**Included in Living Waters**	**Total Statewide**
Aquatic Vascular Plants	23	114
Fishes	11	57
Mussels	7	12
Aquatic Invertebrates	23	An estimated > 2500

species. Some Core Habitats were created for suites of common species, such as forest birds, which are particularly threatened by habitat fragmentation. In these cases, the individual common species are not listed.

What does 'Status' mean?

The Division of Fisheries and Wildlife determines a status category for each rare species listed under the Massachusetts Endangered Species Act, M.G.L. c.131A, and its implementing regulations, 321 CMR 10.00. Rare species are categorized as Endangered, Threatened, or of Special Concern according to the following:

- ***Endangered*** species are in danger of extinction throughout all or a significant portion of their range or are in danger of extirpation from Massachusetts.
- ***Threatened*** species are likely to become Endangered in Massachusetts in the foreseeable future throughout all or a significant portion of their range.
- ***Special Concern*** species have suffered a decline that could threaten the species if allowed to continue unchecked or occur in such small numbers or with such restricted distribution or specialized habitat requirements that they could easily become Threatened in Massachusetts.

In addition, the Natural Heritage & Endangered Species Program maintains an unofficial ***watch list*** of plants that are tracked due to potential conservation interest or concern, but are not regulated under the Massachusetts Endangered Species Act or other laws or regulations. Likewise, described natural communities are not regulated any laws or regulations, but they can help to identify ecologically important areas that are worthy of protection. The status of natural communities reflects the documented number and acreages of each community type in the state:

- ***Critically Imperiled*** communities typically have 5 or fewer documented sites or have very few remaining acres in the state.
- ***Imperiled*** communities typically have 6-20 sites or few remaining acres in the state.
- ***Vulnerable*** communities typically have 21-100 sites or limited acreage across the state.
- ***Secure*** communities typically have over 100 sites or abundant acreage across the state; however excellent examples are identified as Core Habitat to ensure continued protection.

Legal Protection of Biodiversity

BioMap and Living Waters present a powerful vision of what Massachusetts would look like with full protection of the land that supports most of our biodiversity. To create this vision, some populations of state-listed rare species were deemed more likely to survive over the long-term than others.

Regardless of their potential viability, all sites of state-listed species have full legal protection under the Massachusetts Endangered Species Act (M.G.L. c.131A) and its implementing regulations (321 CMR 10.00). Habitat of state-listed wildlife is also protected under the Wetlands Protection Act Regulations (310 CMR 10.37 and 10.59). The ***Massachusetts Natural Heritage Atlas*** shows **Priority Habitats**, which are used for regulation under the Massachusetts Endangered Species Act and Massachusetts Environmental Policy Act (M.G.L. c.30) and **Estimated Habitats**, which are used for regulation of rare wildlife habitat under the Wetlands Protection Act. For more information on rare species regulations, see the *Massachusetts Natural Heritage Atlas*, available from the Natural Heritage & Endangered Species Program in book and CD formats.

BioMap and Living Waters are conservation planning tools and do not, in any way, supplant the Estimated and Priority Habitat Maps which have regulatory significance. Unless and until the combined BioMap and Living Waters vision is fully realized, we must continue to protect all populations of our state-listed species and their habitats through environmental regulation.

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Understanding Core Habitat Summaries

Following the BioMap and Living Waters Core Habitat species and community lists, there is a descriptive summary of each Core Habitat that occurs in your city or town. This summary highlights some of the outstanding characteristics of each Core Habitat, and will help you learn more about your city or town's biodiversity. You can find out more information about many of these species and natural communities by looking at specific ***fact sheets*** at www.nhesp.org.

Next Steps

BioMap and Living Waters were created in part to help cities and towns prioritize their land protection efforts. While there are many reasons to conserve land – drinking water protection, recreation, agriculture, aesthetics, and others – BioMap and Living Waters Core Habitats are especially helpful to municipalities seeking to protect the rare species, natural communities, and overall biodiversity within their boundaries. Please use this report and map along with the rare species and community fact sheets to appreciate and understand the biological treasures in your city or town.

Protecting Larger Core Habitats

Core Habitats vary considerably in size. For example, the average BioMap Core Habitat is 800 acres, but Core Habitats can range from less than 10 acres to greater than 100,000 acres. These larger areas reflect the amount of land needed by some animal species for breeding, feeding, nesting, overwintering, and long-term survival. Protecting areas of this size can be very challenging, and requires developing partnerships with neighboring towns.

Prioritizing the protection of certain areas within larger Core Habitats can be accomplished through further consultation with Natural Heritage Program biologists, and through additional field research to identify the most important areas of the Core Habitat.

Additional Information

If you have any questions about this report, or if you need help protecting land for biodiversity in your community, the Natural Heritage & Endangered Species Program staff looks forward to working with you.

Contact the Natural Heritage & Endangered Species Program:

by Phone *508-792-7270, Ext. 200*

by Fax: *508-792-7821*

by Email: *natural.heritage@state.ma.us*.

by Mail: *North Drive*
Westborough, MA 01581

The GIS datalayers of BioMap and Living Waters Core Habitats are available for download from MassGIS: www.mass.gov/mgis

Check out www.nhesp.org for information on:

- Rare species in your town
- Rare species fact sheets
- BioMap and Living Waters projects
- Natural Heritage publications, including:
  - Field guides
  - Natural Heritage Atlas, and more!

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BioMap: Species and Natural Communities

New Marlborough

Core Habitat BM855

Natural Communities

Common Name	Scientific Name	Status
Acidic Shrub Fen		Vulnerable
Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp		Imperiled
Calcareous Pondshore/Lakeshore		Imperiled
Calcareous Rock Cliff Community		Vulnerable
Calcareous Sloping Fen		Imperiled
Hemlock-Hardwood Swamp		Secure
Hickory - Hop Hornbeam Forest/Woodland		Imperiled
Major-River Floodplain Forest		Imperiled
Northern Hardwoods - Hemlock - White Pine Forest		Secure
Shallow Emergent Marsh		Secure
Shrub Swamp		Secure
Transitional Floodplain Forest		Imperiled
Yellow Oak Dry Calcareous Forest		Imperiled

Plants

Common Name	Scientific Name	Status
A Filmy-Fern	*Trichomanes intricatum*	Endangered
Allegheny Buttercup	*Ranunculus allegheniensis*	Watch Listed
Andrews' Bottle Gentian	*Gentiana andrewsii*	Endangered
Autumn Coralroot	*Corallorhiza odontorhiza*	Special Concern
Barren Strawberry	*Waldsteinia fragarioides*	Special Concern
Black Cohosh	*Cimicifuga racemosa*	Endangered
Bristly Buttercup	*Ranunculus pensylvanicus*	Threatened
Crooked-Stem Aster	*Symphotrichum prenanthoides*	Threatened

BioMap: Species and Natural Communities

New Marlborough

Culver's-Root	*Veronicastrum virginicum*	Threatened
Davis's Sedge	*Carex davisii*	Endangered
Dioecious Sedge	*Carex sterilis*	Threatened
Downy Arrowwood	*Viburnum rafinesquianum*	Endangered
Drooping Speargrass	*Poa languida*	Endangered
False Pennyroyal	*Trichostema brachiatum*	Endangered
Fen Cuckoo Flower	*Cardamine pratensis var palustris*	Threatened
Fen Sedge	*Carex tetanica*	Special Concern
Foxtail Sedge	*Carex alopecoidea*	Threatened
Frank's Lovegrass	*Eragrostis frankii*	Special Concern
Gattinger's Panic-Grass	*Panicum gattingeri*	Special Concern
Gray's Sedge	*Carex grayi*	Threatened
Great Blue Lobelia	*Lobelia siphilitica*	Endangered
Green Dragon	*Arisaema dracontium*	Threatened
Hairy Agrimony	*Agrimonia pubescens*	Threatened
Hairy Beardtongue	*Penstemon hirsutus*	Endangered
Hairy Wild Rye	*Elymus villosus*	Endangered
Hairy Wood-Mint	*Blephilia hirsuta*	Endangered
Hemlock Parsley	*Conioselinum chinense*	Special Concern
Intermediate Spike-Sedge	*Eleocharis intermedia*	Threatened
Labrador Bedstraw	*Galium labradoricum*	Threatened
Long-Styled Sanicle	*Sanicula odorata*	Threatened
Lyre-Leaved Rock-Cress	*Arabis lyrata*	Endangered
Mossy-Cup Oak	*Quercus macrocarpa*	Special Concern
Narrow-Leaved Spring Beauty	*Claytonia virginica*	Endangered
Narrow-Leaved Vervain	*Verbena simplex*	Endangered
Purple Cress	*Cardamine douglassii*	Endangered
Red Mulberry	*Morus rubra*	Endangered
Sensitive Rare Plant		

Sessile Water-Speedwell	*Veronica catenata*	Endangered
Shining Wedgegrass	*Sphenopholis nitida*	Threatened
Small Dropseed	*Sporobolus neglectus*	Endangered
Small-Flowered Agrimony	*Agrimonia parviflora*	Endangered
Smooth Rock-Cress	*Arabis laevigata*	Threatened
Stiff Gentian	*Gentianella quinquefolia*	Watch Listed
Swamp Birch	*Betula pumila*	Endangered
Sweet Coltsfoot	*Petasites frigidus var palmatus*	Endangered
Tuckerman's Sedge	*Carex tuckermanii*	Endangered
Wapato	*Sagittaria cuneata*	Threatened
Yellow Oak	*Quercus muehlenbergii*	Threatened

Invertebrates

Common Name	Scientific Name	Status
Dion Skipper	*Euphyes dion*	Threatened
Slender Walker	*Pomatiopsis lapidaria*	Endangered

Vertebrates

Common Name	Scientific Name	Status
Bald Eagle	*Haliaeetus leucocephalus*	Endangered
Eastern Box Turtle	*Terrapene carolina*	Special Concern
Four-toed Salamander	*Hemidactylium scutatum*	Special Concern
Jefferson Salamander	*Ambystoma jeffersonianum*	Special Concern
Spotted Turtle	*Clemmys guttata*	Special Concern
Spring Salamander	*Gyrinophilus porphyriticus*	Special Concern
Wood Turtle	*Clemmys insculpta*	Special Concern

Core Habitat BM953

Invertebrates

Common Name	Scientific Name	Status
Beaver Pond Clubtail	*Gomphus borealis*	Special Concern

Vertebrates

Common Name	Scientific Name	Status
American Bittern	*Botaurus lentiginosus*	Endangered
Wood Turtle	*Clemmys insculpta*	Special Concern

Core Habitat BM1001

Plants

Common Name	Scientific Name	Status
Small Site for Rare Plant		

Core Habitat BM1008

Plants

Common Name	Scientific Name	Status
Small Site for Rare Plant		

Core Habitat BM1043

Vertebrates

Common Name	Scientific Name	Status
Long-Tailed Shrew	*Sorex dispar*	Special Concern

Core Habitat BM1084

Plants

Common Name	Scientific Name	Status
Small Site for Rare Plant		

Core Habitat BM1087

Plants

Common Name	Scientific Name	Status
Small Site for Rare Plant		

BioMap: Species and Natural Communities

New Marlborough

Core Habitat BM1091

Plants

Common Name	Scientific Name	Status
Small Site for Rare Plant		

Core Habitat BM1108

Natural Communities

Common Name	Scientific Name	Status
Calcareous Seepage Marsh		Imperiled

Plants

Common Name	Scientific Name	Status
Climbing Fumitory	*Adlumia fungosa*	Threatened
Hemlock Parsley	*Conioselinum chinense*	Special Concern

Core Habitat BM1115

Natural Communities

Common Name	Scientific Name	Status
Spruce-Fir Boreal Swamp		Vulnerable

Plants

Common Name	Scientific Name	Status
Dwarf Mistletoe	*Arceuthobium pusillum*	Special Concern

Core Habitat BM1138

Plants

Common Name	Scientific Name	Status
Small Site for Rare Plant		

BioMap: Core Habitat Summaries

New Marlborough

Core Habitat BM855

This is a large, diverse, and valuable Core Habitat that supports a suite of rare plants and animals, as well as natural communities. It encompasses much of the lower Konkapot and Housatonic Rivers, Schenob Brook, and the Green River, as well as East Mountain. These diverse areas contain a wide variety of wetland, upland, and riparian habitats that support several rare species of vertebrates, from Wood Turtles to Bald Eagles. This area also provides key invertebrate habitats for species such as the Dion Skipper butterfly. The many natural communities here include multiple calcareous wetlands, and these unusual calcareous conditions create plant biodiversity hotspots, with over 100 rare plant populations documented from within the Core Habitat. Some sections of the Core Habitat have been preserved as conservation land, including East Mountain State Forest and important areas in Sheffield. However, many other large and critical areas are currently unprotected.

Natural Communities

This very large Core Habitat contains a great diversity of exemplary natural communities ranging from the Major-River Floodplain Forests of the Housatonic River to patches of Yellow Oak Dry Calcareous Forests on dry hillsides underlain with calcareous rock. Calcareous, or nutrient-rich, rock characterizes many of the natural communities within this Core Habitat. Large, mature, and high-quality Black Ash-Red Maple-Tamarack Calcareous Seepage Swamps occur throughout the wetlands in this Core Habitat. These communities are mixed deciduous-coniferous forested swamps occurring in areas where there is calcium-rich groundwater seepage. The nutrient enrichment results in many rare calcium-loving plant species. Also influenced by nutrient-rich groundwater seepage are the many Calcareous Sloping Fens within this Core Habitat. Calcareous Sloping Fens are open, sedge-dominated wetlands occurring on slight to moderate slopes where there is calcareous groundwater seepage. They are rare species "hot spots" with many associated rare plant and animal species.

Plants

This very large Core Habitat contains an abundance of rare plant species adapted to calcareous soils - over 100 rare plant populations! Exemplary populations within this area include a large and pristine population of Swamp Birch in a calcareous peatland, several highly viable populations of Mossy-Cup Oak in calcareous seepage swamps, a very large occurrence of Foxtail Sedge in a floodplain meadow, and the state's largest populations of Autumn Coralroot and Drooping Speargrass.

Invertebrates

In southwestern Sheffield, this Core Habitat includes a pristine area of calcareous fens along the Housatonic River that are habitat for rare invertebrates such as the Dion Skipper butterfly and the Slender Walker snail. Most of this habitat is on conservation land owned by the Nature Conservancy; nevertheless, conservation of the remaining unprotected land in this area is important to increase the amount of contiguous protected habitat and to help ensure the long-term viability of rare species inhabiting the area.

Vertebrates

This is a large and complex Core Habitat that supports a diverse array of rare vertebrate species within a variety of wetland, upland, and riparian habitats. The relatively large and connected riparian areas provide significant habitat for Wood Turtles, and this may be one of the best areas in the state in which to focus conservation efforts for this species. Conservation efforts directed at Wood Turtles should seek to protect long corridors of undeveloped, connected habitats that extend at least 600 yards on both sides of streams and rivers.

In addition, the complexes of wet meadows, shrub swamps, wooded swamps, vernal pools, and upland forests provide significant habitat for Spotted Turtles. Several populations of Jefferson Salamanders are present in areas of deciduous and mixed forests with vernal pools. Wetlands and seeps where sphagnum moss is abundant provide significant habitat for Four-toed Salamanders. High-gradient coldwater brooks and headwater seeps on East Mountain also provide habitat for Spring Salamanders.

Portions of the Housatonic River within this Core Habitat, including forested river banks, are used by wintering Bald Eagles.

Core Habitat BM953

This Core Habitat encompasses several miles of riparian habitats and adjacent uplands along the Konkapot River and Rawson and Harmon Brooks. Together these areas provide key habitat for Wood Turtles, American Bitterns, and other wildlife. Although most of the southern half of the Core Habitat is protected as conservation land within Sandisfield State Forest, most of the northern half is currently unprotected.

Invertebrates

Within the southeastern end of this Core Habitat is a brook and associated swampy wetlands that are habitat for the Beaver Pond Clubtail dragonfly. The surrounding landscape is both forested and relatively unfragmented, which protects the river from pollution. This Core Habitat is located less than 10 km from other habitat for the Beaver Pond Clubtail within the Core Habitat in Otis, which probably allows for dispersal of individual dragonflies between these two areas. The southeastern portion of this Core Habitat (the part that is habitat for the Beaver Pond Clubtail) is located entirely within the Sandisfield State Forest and other conservation lands.

Vertebrates

Miles of meandering streams and brooks, bordered by a mosaic of wet meadows, shrub swamps, upland forests, and small fields, provide significant habitat for Wood Turtles. Higher-gradient streams and headwater seeps may support significant populations of Spring Salamanders as well. Jefferson Salamanders are likely present where vernal pools are abundant. The wet meadows and small shallow marshes created by beaver activity provide habitat for American Bitterns and other wetland birds.

BioMap: Core Habitat Summaries

New Marlborough

Core Habitat BM1043

Vertebrates

This Core Habitat encompasses nearly three square miles of mixed upland forests on the slopes of Woodruff Mountain that provide habitat for rare vertebrates. Habitats here support one of the few documented populations of Long-tailed Shrews in Massachusetts. Over two miles of cold, high-gradient brooks flow down the north, south, and west sides of Woodruff Mountain, likely providing habitat for Spring Salamanders. The southeast corner of this Core Habitat is contained within Sandisfield State Forest, but the rest appears unprotected.

Core Habitat BM1108

This Core Habitat at and around Benton Hill contains diverse habitats for Massachusetts' rare plants and animals. It includes the state's best Calcareous Seepage Marsh, as well as its largest population of the rare Hemlock Parsley.

Natural Communities

This Core Habitat contains the largest and highest-quality Calcareous Seepage Marsh known in the state. This uncommon natural community type is characterized by nutrient-rich groundwater seepage, and usually supports a much more diverse assemblage of plants than a typical emergent marsh.

Plants

One of the state's largest occurrences of Hemlock Parsley (Species of Special Concern) is found within a shrubby calcareous fen in this Core Habitat.

Core Habitat BM1115

Natural Communities

This Core Habitat contains the largest Spruce-Fir Boreal Swamp known in the state. Spruce-Fir Boreal Swamps are forested wetlands dominated by Red Spruce and Balsam Fir. These swamps are typically found at stream headwaters or in poorly drained basins in the mountainous, northwestern part of the state.

Plants

A large and vigorous population of Dwarf Mistletoe, a hemiparasitic plant on Black Spruce, is thriving here in an acidic swamp community in an undisturbed landscape.

Living Waters: Species and Habitats

New Marlborough

Core Habitat LW013

Fishes

Common Name	Scientific Name	Status
Longnose Sucker	*Catostomus catostomus*	Special Concern

Core Habitat LW045

Exemplary Habitats

Common Name	Scientific Name	Status
Lake/Pond Habitat		----------

Core Habitat LW174

Invertebrates

Common Name	Scientific Name	Status
Piedmont Groundwater Amphipod	*Stygobromus tenuis tenuis*	Special Concern

Core Habitat LW175

Invertebrates

Common Name	Scientific Name	Status
Piedmont Groundwater Amphipod	*Stygobromus tenuis tenuis*	Special Concern
Taconic Cave Amphipod	*Stygobromus borealis*	Endangered

Core Habitat LW299

Plants

Common Name	Scientific Name	Status
Water Star-grass	*Heteranthera dubia*	Watch Listed

Fishes

Common Name	Scientific Name	Status
Bridle Shiner	*Notropis bifrenatus*	Special Concern

Core Habitat LW375

Exemplary Habitats

Common Name	Scientific Name	Status
Invertebrate Habitat		----------

Living Waters: Core Habitat Summaries

New Marlborough

Core Habitat LW013

This Core Habitat in the Umpachene River and its tributaries supports the Longnose Sucker, a fish Species of Special Concern. This species is restricted to the western watersheds of Massachusetts, where it is found in cold, clean, oxygen-rich streams with gravel bottoms. The Longnose Sucker sometimes migrates many miles to reach its spawning grounds. The eggs are released over the gravel bottom, making them susceptible to excess sedimentation, flow alterations, and increases in water temperature. These habitat degradations can be particularly detrimental to the reproductive success of this slow-growing fish that does not reach maturity until 5 to 7 years of age. Protecting the riparian areas adjacent to this Core Habitat will help maintain the cool, clean freshwater habitat of the Longnose Sucker.

Core Habitat LW045

Harmon Pond is an interesting, groundwater-fed pond with a robust assemblage of native aquatic plants that provides nearshore habitat for fishes and aquatic invertebrates. The middle of the pond is deep, preventing aquatic plant growth and providing a different type of habitat for aquatic invertebrates. This pond has little development in its riparian areas or watershed.

Core Habitat LW174

This Core Habitat contains one of only two spring houses from which the rare Piedmont Groundwater Amphipod is known in Massachusetts. This amphipod species inhabits groundwater and may use more underground aquatic habitat than is shown here, as very little is known about its life history.

Core Habitat LW175

This Core Habitat contains the only known locality of the Taconic Cave Amphipod, and represents one of two spring houses from which the Piedmont Groundwater Amphipod is known in Massachusetts. These amphipod species inhabit groundwater and may use more underground aquatic habitat than is shown here, as very little is known about their life history.

Core Habitat LW299

Shallow areas of Lake Buel support a population of the uncommon plant Water Star-Grass, which has tiny yellow flowers and long grass-like leaves. Native freshwater plants like the Water Star-Grass are an important component of aquatic ecosystems, providing habitat and nutrition for fishes and invertebrates, and adding oxygen to the water through photosynthesis. The well-vegetated waters of Lake Buel support a population of Bridle Shiner, a fish Species of Special Concern that has a small range from southern New England to South Carolina, and has been declining or extirpated in much of the region. The Bridle Shiner feeds on small aquatic insects and other invertebrates, and is an important part of the freshwater ecosystem as prey for larger fishes. The Bridle Shiner population in Lake Buel has persisted at least since 1951.

Core Habitat LW375

This section of Stevens Brook flows through a dense Eastern Hemlock forest growing on steep

slopes. The streambed is made up of a good mix of stone sizes that support a healthy community of aquatic insects, including the more ecologically sensitive groups: mayflies, stoneflies, and caddisflies. The forested stream banks help maintain the high-quality habitat by shading the water to keep it cool, by providing a natural energy source to the stream ecosystem in the form of leaves, needles, and sticks, and by controlling the runoff of sediments, excess nutrients, and water.

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